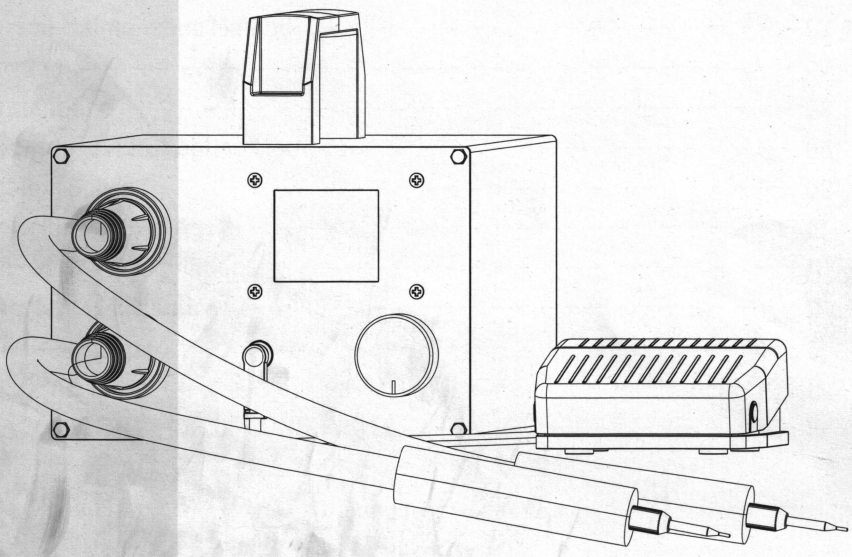
Seesii®

Capacitor Digital Display Spot Welder

Product Instruction Manual

SE-223



Thank you for using this product. In order to ensure that you can fully understand and use this product, please read this user manual carefully and keep it for future reference.
If you encounter any problem, please feel free to contact us.

Customer service:support@seesiius.com
Instagram: @seesii_official
Youtube: @SeesiiOfficial
Facebook: @SeeSiiOfficial

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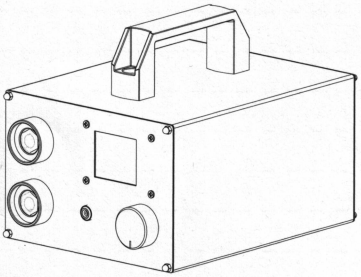
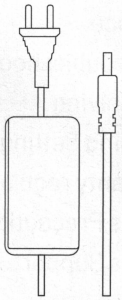
Introduction

This product is a capacitor energy storage type spot welding machine, mainly used for spot welding 18650 batteries, practical nickel strip thickness up to 0.25mm, the maximum welding 0.3mm.
Its strong welding capability allows it to weld 0.1mm thin copper sheet on the main outlet end of the battery pack to increase its overcurrent capacity.

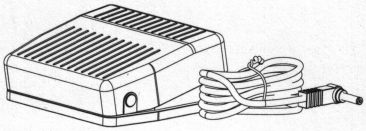
Product List



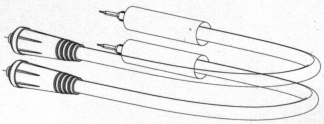
Spot Welder



Charger

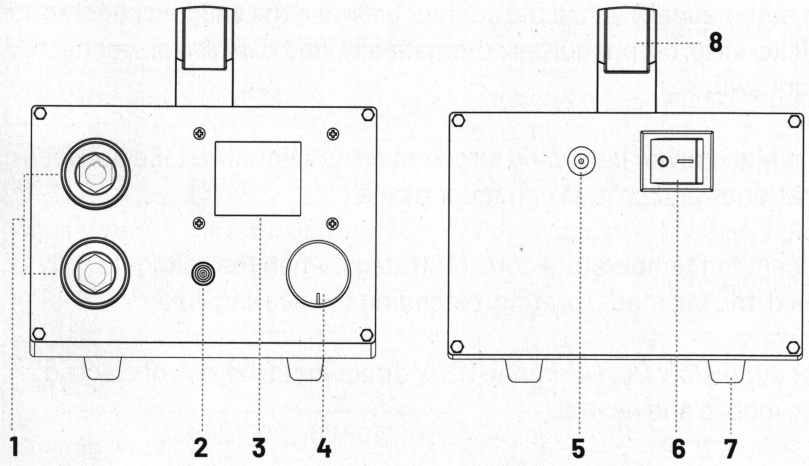


Foot pedal



Spot welding pen

Product Description



Number	Description	Operation
1	Spot welding pen interface	Connect the spot welding pen,
2	Foot joint	Connect the foot pedal
3	HD display	Adjusting the output power size
4	Power regulation	Function menu display area
5	Charaging interface	Charge using 12V/3.5A or above adapter
6	Switch	Power on and start working
7	Foot pad	Support the entire machine
8	Handle	Carry

Product Characteristics

- It can automatically sense the contact between the welding needle and the nickel strip, output pulses automatically, and can also be connected to a foot switch.

- Built in high-power balancing circuit to ensure equal voltage between two batteries and protect capacitor usage.

- Intelligent fan temperature control strategy, when the voltage is fully charged, the fan stops rotating, extending the bearing life.

- Power supply 12V DC, safer than 220V direct input, no risk of electric shock, mobile and usable.

- 25.00 level ultra fine adjustment, the fast/slow knob can quickly adjust the gear with asynchronous precision.

- This capacitor can provide extremely strong fast charging and discharging capabilities. The pole ears led out by laser welding are locked with M6 bolts on the copper bar until they are recessed. The transition between copper and aluminum is achieved by using an inert metal brass gasket, which avoids electrochemical corrosion and ensures good stability during use. Screening out internal resistance below 0.6mR, high standards can ensure consistent and stable quality.

Product parameters

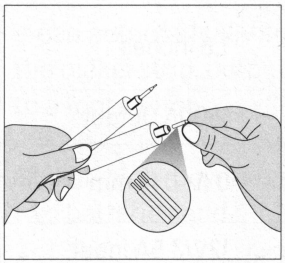
Product name	Capacitor digital display spot welder	Screen size	1.8 inches
Model number	SE-223	Peak value	1400A Output
Spot welding pen	Removable pure copper material	Welding thickness	0 .1- 0 .3 mm
dimension	187x150x100 (mm)	Power source	12V/3.5A input
Product weight	2.1 kg	Surface material	Aero-aluminium alloy
Capacitance capacity	3000F	Charger Model	1240
Charger Input	AC100-240V 50/60Hz 42W	Charger Output	DC12V 4A

Operation Instructions

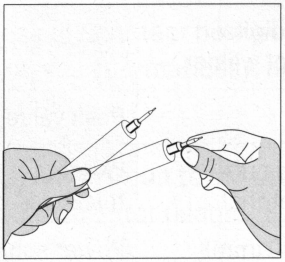
1. Power on: Press button O on the back of the spot welding machine, and the power on is successful.
2. Shutdown: Press button — behind the spot welding machine to successfully shut down.
3. Automatic welding mode: Two welding pens are placed at the nickel strip, which can automatically sense the contact between the welding needle and the nickel strip, and output pulses to complete the welding. Foot welding mode: Before starting up, insert the foot switch while holding it down, and automatically recognize it as foot welding mode after starting up.
4. The knob can adjust the output current size. The larger the value, the higher the output.
5. The recommended spot welding angle ranges from 45° to 60°. (Angle between the soldering pin and the welded point)

Note:
(1) The product needs to be plugged in for use and cannot be used normally after power failure.
(2) After the machine is turned on, it needs to be charged to the display screen showing 4.8V for spot welding.

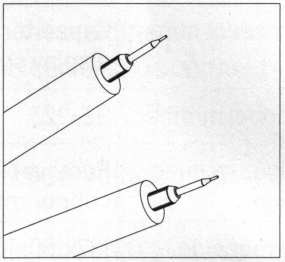
Install Soldering Pen



Step 1: Insert solder needle



Step 2: Turn the soldering pen nut clockwise



Step 3: Tighten the soldering pen nut

To ensure welding efficiency and quality, the following are required when using welding tools:

1 . Always check whether the welding pin head is oxidized and blackened. If it is oxidized or blackened, it should be polished with fine abrasive cloth in time. keep it bright and smooth.

2. To prevent oxidation of the welding pin, a small amount of lubricating oil can be applied as an anti-oxidation coating on the welding pin.

3. The original nano-oxide aluminum alloy welding pin must be used.

4. If the loss of welding needle is too short, the welding needle cannot be pulled out from the welding pen and replaced with a new welding needle. If the loss of welding needle is serious, at least 2mm needle shall be reserved so that the flat jaw pliers can clamp the welding needle and pull it out of the needle seat for replacement.

5. After the new welding needle is installed into the welding needle clamp, shall be added to weld the welding needle firmly on the welding needle clamp. If the welding needle is not in close contact with the welding pen, the welding effect will be affected.

Attention

1 . After the machine is turned on, it needs to be charged to the display screen showing 4.8V for spot welding.

2. Do not touch the tip of the spot welding pen together, which may cause a short circuit, damage the circuit board, and the machine cannot work.

3. During the welding process, pay attention to adjusting the current size. It is necessary to follow up on the thickness of the welded nickel sheet and confirm the effect after debugging.

4. After long-term welding, the spot welding pen needs to be polished with a file. Avoid affecting poor welding or instability.

5. Please start the test from the 1st gear before using it, and gradually increase it if it is not enough. Start the test from the small gear to the large gear gradually.

6. The correct operation is to press the tip of the pen against the nickel sheet with some force during spot welding.

7. Do not perform spot welding after unplugging the power plug, it will damage the machine.

8. Turn off the main switch when not in use, no need to discharge the capacitor, just store it in a dry environment.

9. It needs to be plugged into the power supply and cannot be used after the power is cut off.

10. Non-professionals should not disassemble the casing.

Storage Maintenance Method

- If you do not use it for a long time, please fully charge it and store it, and recharge it every 2 months to extend the service life.
- Uncontrolled output may cause damage to the control pipeline.Please immediately remove the spot welding pen and stop the machine. Contact after-sales maintenance and do not continue with the welding test.

Soldering pen short circuit

This product has sufficient redundancy design, even if the welding pen short circuit will not damage the circuit, but the short circuit current is high, may affect the battery life,please try to avoid the welding pen short circuit when the current output.

Warning

1. Please do now not charge the product for a long time with out care.
2. Do now not throw it into the fireplace.
3. Do no longer fee, use or vicinity under excessive temperature.
4. Do not regulate or restore this product with the aid of yourself.
5. Do not positioned into water or permit other beverages into the product.
6. Do not use the blade and other sharp objects to delimit the LCD screen to cause screen damage.
7. Please use the power supply and accessories that meet the safety standards.It is recommended to use the original accessories.
8. Please ensure that the two soldering pens are not in contact before turning on the power of the machine.
9. Do not be exposed to rain or moisture.
10. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid a hazard.

11. This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.
    Children should be supervised to ensure they do not play with the appliance.
12. Do not modify, disassemble, or repair this product without authorization.

Maintenance

Failure	Probable cause	Solution
Unable to boot	Power failure	Connect the charger to charge
The screen is not bright	Abnormal display	Return for after-sales repair
Unable to charge	Charger failure	Replace charger
	Circuit fault	Return for after-sales repair
non-weldable	Nickel thickness	Replace charger
	Welding wrong material	Cannot be welded to aluminum or copper
	Capacitance aging	After-sale return and replacement

Specific Troubleshooting Methods

- No power on - use a multi-meter to measure the soldering pen interface, fully charged for inspection, the voltage range should be between 3.2-5.4V .

- Does not discharge - check that the tip of the welding pen has black oxide, and remove it after cleaning with sandpaper to avoid sparks. Or replace the solder needle.
- Clean welding pen does not discharge - the voltage is too low, the spot welding function is disabled.

Problem Solving

Q: What can the ultracapacitor spot welder weld?
A: This product belongs to precision capacitor spot welding machine, from 0. 05mm thin nickel strip to 0.3mm thick steel strip can be soldered firmly. The output energy is controlled by a fine knob with 250 levels of output, and the solid time can ensure that the solder joint is smooth and delicate. The inclusion of oxygen is reduced, the overcurrent capacity of the battery pack is improved, and the reliability is greatly improved compared with the coarse gear and even the AC welding machine. Can also be stacked welding 0.1 + 0.1 mm nickel + copper sheet, butt welding 2 mm wire and so on

Q: Does the spot welder need to be charged?
A: Only need to charge once when received, due to reasonable design, so that the circuit is completely disconnected after shutdown, after each spot welding, only need to connect the 12V power adapter attached, because the principle of capacitor spot welding machine is low energy long-term input storage in the capacitor, control instant discharge, the average power is small, household electricity can be.

Q: How safe is it?
A: Capacitors are one of the world's recognized safe energy storage methods,because there is no combustible material inside the capacitor, only aluminum plate and electrolyte.So even if it is thrown into the fire, it will not cause combustion and other accidents.Only reverse connection and overpressure can produce pressure relief valve action,but choosing a finished spot welder has helped you eliminate this risk.

Spot Welding Settings

Recommended Power Levels for Various Material Thicknesses and Types

Model	Spot Welding Material	Thickness (mm)	Recommended Setting for 90-100% Battery
SE-223	Stainless Steel	0.1	10
		0.12	15
		0.15	20
		0.2	25
	Brass Sheet	0.1	15
		0.12	20
		0.15	25
	Steel Sheet	0.1	10
		0.12	15
		0.15	20
		0.2	25
	Pure Nickel Sheet	0.1	15
		0.12	17
		0.15	20
		0.2	25
	Nickel-Plated Sheet	0.1	8
		0.12	10
		0.15	15
		0.2	17
		0.25	20
		0.3	23

Non-warranty regulations

1. Unauthorized maintenance, misuse, collision, negligence, abuse, liquid intake, accident, alteration, incorrect use of non-product accessories, or tearing or altering of labels or anti-counterfeiting marks.

2. Used welding pens, nickel tapes and other consumables.

3. The warranty period has expired.

4. Damage caused by force majeure.

5. Circumstances that do not meet the performance failures listed in the Performance Failure Table.

6. The product and its accessories have performance failures listed in the "Performance Failure Table" due to human reasons.

After-sales Precautions

1. The returned product shall not affect the secondary sales, and must be kept as it is and sent back. If there are any gifts, please mail them together. If the return or exchange is caused by quality problems, please pay the postage in advance and return after we receive the goods.

2. If the return is caused by non-quality reasons, if the gifts such as nickel tape, insulating paper, etc. have been used, the secondary sales of the product will be affected, and the customer must compensate for the loss of the gifts at the original price.

After-sales Support

Thank you very much for this purchase.
If there is any problem with the product, please contact our company so that we can deal with it quickly.

After-sale Mailbox: support@seesiius.com
Instagram：@seesii_official
Youtube: @SeesiiOfficial
Facebook：@SeeSiiOfficial

■ In order to respond as early as possible, please inform the following information when consulting.

1. Order number
2. Defective products
3. Description of the fault
4. Desired solution

DISPOSAL

Disposal of the appliance

This product has been marked with a symbol relating to removing electric and electronic waste. This means that this product shall not be discarded with household waste but that it shall be returned to a collection system. It will then be recycled or dismantled in order to reduce the impact on the environment. Electric and electronic equipment can be hazardous for the environment and for human health since they contain hazardous substances.

Disposal of the packaging

The packaging consists of cardboard and correspondingly marked plastics that can be recycled. Make these materials available for recycling.

Seesii®

Spot welder
Model: SE-223
Power Supply Voltage: 240V
Output Power: 10.5KW

Manufacturer: ShenZhen Sky Blue Ocean Technology Co., Limited
Manufacturer Address: Building B, Gongcun New City Commercial Center (Huihai Square), No.31 Sanlian chuangye Road, Sanlian Community, Longhua Street, LonghuaDistrict, ShenzhenCity, Room2301-2302-2305-2306-2307-2308
Email: **support@seesiius.com**

EC REP

Apex CE Specialists GmbH
Grafenberger Allee 277, 40237 Düsseldorf, DE
TEL: 49 21312066043
E-mail: oylily88@gmail.com

UK REP

APEX CE SPECIALISTS LIMITED
6f East Union Street, Manchester, England, M16 9AE
TEL: 441616371080
E-mail: oylily88@gmail.com

Made in China

EU/UK DECLARATION OF CONFORMITY

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Manufacturer: ShenZhen Sky Blue Ocean Technology Co.,Limited
Manufacturer Address: Building B, Gongcun New City Commercial Center (Huihai Square), No. 31 Sanlian Chuangye Road, Sanlian Community, Longhua Street, Longhua District, Shenzhen City, 2301-2302-2305-2306-2307-2308

EU Representative: Apex CE Specialists GmbH
Address: Grafenberger Allee 277, 40237 Düsseldorf, DE
TEL: 49 21312066043
E-mail: oylily88@gmail.com

UK Representative: APEX CE SPECIALISTS LIMITED
Address: 6f East Union Street, Manchester, England, M16 9AE
TEL: 441616371080
E-mail: oylily88@gmail.com

Product: spot welder
Model: SE-223
Brand Name: Seesii

We declare that the product described above, to which this declaration of conformity refers to, is in conformity with the relevant Union harmonization legislation:
EMC Directive 2014/30/EU
LVD Directive 2014/35/EU

through the technical standards/specifications specify below:
EN IEC 55014-1:2021; EN IEC 55014-2:2021
EN IEC 61000-3-2:2019+A1:2021
EN 61000-3-3:2013+A1:2019+A2:2021
EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021
EN 60335-2-45:2002+A1:2008+A2:2012+A11:2023
EN 62233:2008

Signed for and on behalf of

Signature:
Name: ma chao

Position: QA Director
Place and date of issue: Shenzhen, July 30, 2024